2.2.8.4 ~~**ADS-B Report Assembly Function Data**~~**Receiving Installation Time Processing** ~~**and Formatting**~~

2.2.8.4.1 ~~**Receiving Device Position - Latitude**~~**Precision Installations**

~~If the Range Monitoring Technique is used for locally unambiguous decoding of tracked emitter position, as specified in section 2.2.8.1.2, then the Receiving Device shall accept own position latitude (WGS-84) as follows:~~

~~a. Own position latitude shall be used to enable locally unambiguous decoding of position information encoded in ADS-B Airborne Position Messages (see paragraph 2.2.3.2.3) in accordance with sections A.7.4 through A.7.8.4 of Appendix A.~~

~~b. Own position latitude shall be used to enable locally unambiguous decoding of position information encoded in ADS-B Surface Position Messages (see paragraph 2.2.3.2.4) in accordance with section A.7.4 through A.7.8.4 of Appendix A.~~

~~***Note:*** *Own position information can provide the information necessary to accomplish unambiguous decoding of Surface Position message data.*~~

~~**2.2.8.4.2 Receiving Device Position - Longitude**~~

~~If the Range Monitoring Technique is used for locally unambiguous decoding of tracked emitter position, as specified in section 2.2.8.1.3, then the Receiving Device shall accept own position longitude (WGS-84) as follows:~~

~~a. Own position longitude shall be used to enable locally unambiguous decoding of position information encoded in ADS-B Airborne Position Messages (see paragraph 2.2.3.2.3) in accordance with section A.7.4 through A.7.8.4 of Appendix A.~~

~~b. Own position longitude shall be used to enable locally unambiguous decoding of position information encoded in ADS-B Surface Position Messages (see paragraph 2.2.3.2.4) in accordance with section A.7.4 through A.7.8.4 of Appendix A.~~

~~***Note:*** *Own position information can provide the information necessary to accomplish unambiguous decoding of Surface Position message data.*~~

~~**2.2.8.4.3 Receiving Installation Time**~~

~~**2.2.8.4.3.1 Precision Installations**~~

Receiving devices intended to generate ADS-B reports based on Surface Position Messages received from type 5 or 6 (see paragraph 2.2.3.2.3.1) equipment or Airborne Position Messages received from type 9 or 10 (see paragraph 2.2.3.2.3.1) equipment shall accept GPS/GNSS UTC Measure Time data via an appropriate interface. Such data shall be used to establish Time of Applicability data required in paragraphs 2.2.8.1.20 through 2.2.8.1.25, 2.2.8.1.27, 2.2.8.2.16 and 2.2.8.3.7.

UTC Measure Time data shall have a minimum range of 300 seconds and a resolution of 0.0078125 (1/128) seconds.

Note: *Time of Applicability information is required in Item #'s 18 through 23, and 25 of Table 2-64, Item #16 of Table 2-70, and Item #7 of Table 2-73. Each of these table entries specify the data to be entered in 9 bits of whole number and 7 bits of fractional data. Therefore, the full range can be up to 511.9921875 seconds having the required resolution of 0.0078125 seconds.*

~~2.2.8.4.3.2~~2.2.8.4.2 Non-Precision Installations

Receiving devices that are not intended to generate ADS-B reports based on Surface Position Messages received from type 5 or 6 (see paragraph 2.2.3.2.3.1) equipment or Airborne Position Messages received from type 9, 10, 20 or 21 (see paragraph 2.2.3.2.3.1) equipment may choose not to use GPS/GNSS UTC Measure Time data if there is no requirement to do so by the end user of the ADS-B reports. In such cases, where there is no appropriate time reference, the Receiving device shall establish an appropriate internal clock or counter having a maximum clock cycle or count time of 20 milliseconds. The established cycle or clock count shall have a range of 300 seconds and a resolution of 0.0078125 (1/128) seconds in order to maintain commonality with the requirements of paragraph 2.2.8.4.3.1.

Note: *Time of Applicability information is required in Item #'s 18 through 23, and 25 of Table 2-64, Item #16 of Table 2-70, and Item #7 of Table 2-73. Each of these table entries specify the data to be entered in 9 bits of whole number and 7 bits of fractional data. Therefore, the full range can be up to 511.9921875 seconds having the required resolution of 0.0078125 seconds.*

2.2.9 ADS-B Report Type Requirements

Equipage classes are defined to accommodate tiered capabilities according to increasingly complex operational objectives while preserving basic inter-operability between classes of equipage. Each equipage class is required to receive messages and process the recovered information into specific ADS-B reports according to the applicable capability. The required ADS-B report capabilities for each class of equipage are defined in the following paragraphs.

2.2.9.1 ADS-B Receiver Report Content Requirements for Class A Equipage

ADS-B Report Requirements for Class A Equipage are defined in Table 2-75.